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Cover: Confocal image of labial-pit-organ (LPO) axons stained with DiO (green), and antennal axons stained with DiI (red), during an early pupal stage of development in the brain of the moth, *Manduca sexta.* Enroute to the antennal lobe, dorsally projecting LPO axons overlap transiently with ventrally projecting antennal mechanosensory axons. LPO axons subsequently diverge and reach the approximate site of the future LPO glomerulus in the antennal lobe one day later. See the article by Kent et al., pages 28–41, this issue.

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Cover: Spinal motor neurons destined to undergo apoptosis accumulate phosphorylated neurofilaments after avulsion of the sciatic nerve. Lumbar spinal cord sections were immunolabeled (brown) for phosphorylated neurofilament (phospho-NF) and counterstained with cresyl violet (blue). The cell bodies of normal motor neurons do not contain phospho-NF. By 4 days postlesion (left), the dendrites (one dendrite is extending upward) of injured motor neurons begin to accumulate phospho-NF. By 7–14 days postlesion (right), the cell body and proximal dendrites of injured motor neurons are filled with phospho-NF. The motor neuron cell body becomes irregular in shape with distorted, thick proximal dendrites (right) and then it assumes a round shape with thin, regressing processes as it enters into apoptosis.

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Cover: Neural cells derived by *in vitro* differentiation from mouse embryonic stem (ES) cells. Glycoconjugates recognized by the HNK-1 antibody were visualized by indirect immunofluorescence (red). Cell nuclei were counterstained with DAPI (blue). See the article by Finley et al., pages 271–287, this issue.

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